PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: RICHARD F. MURPHY Confirmation No.: 9920

Serial No.: 10/667,909 Examiner: C. KOHARSKI

Filed: SEPTEMBER 22, 2003 Group Art Unit: 3763

Docket No.: 1001.1530101 Customer No.: 28075

Title: SURFACE MODIFIED REINFORCING MEMBER FOR MEDICAL

DEVICE AND METHOD FOR MAKING SAME

REPLY BRIEF UNDER 37 C.F.R. § 41.41

Mail Stop Appeal Brief - Patents Assistant Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

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Dear Sirs:

Pursuant to 37 C.F.R. § 41.37, Appellant hereby submits this Reply Brief in response to the Examiner's Answer of March 20, 2008. Permission is hereby granted to charge or credit Deposit Account No. 50-0413 for any errors in fee calculation.

I. STATUS OF CLAIMS

The status of claims is as originally set forth in the Appeal Brief and confirmed in the Examiner's Answer, namely:

Claims 1-56 remain pending, of which claims 1-40 have been withdrawn from consideration. Claims 41-56 remain under consideration.

Claim 41 stands finally rejected under 35 U.S.C. § 102(b) as being anticipated by Cohen (U.S. Patent 5,330,521).

Claims 41-56 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over *Parisi et al.* (U.S. Patent Publication 2001/0027310) in view of *Cohen*.

Claims 41-56 stand appealed.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The statement of the grounds of rejection is as originally set forth in the Appeal Brief and confirmed in the Examiner's Answer, namely:

- 1. Whether Claim 41 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by *Cohen* (U.S. Patent 5,330,521)?
- 2. Whether claims 41-56 are unpatentable under 35 U.S.C. § 103(a) as being unpatentable over *Parisi et al.* (U.S. Patent Publication 2001/0027310) in view of *Cohen*?

III. ARGUMENT

This argument is intended to be read in conjunction with the argument in the Appeal Brief; it is not by itself a complete response to the pending rejections. Instead, it is more narrowly directed towards the Response to Arguments section starting on page 5 of the Examiner's Answer.

In this section of the Examiner's Answer, the Examiner sets forth in greater detail the position, essential to maintaining the rejections, that the etching process disclosed by Cohen

would necessarily result in an increased surface area.* The Examiner argues that "even if the Cohen reference is decreasing the surface area of the reinforcing member, the end result of the [Cohen] etching process is expected to be a reinforcing member that has surface which [is] not completely smooth." Ex. Ans. pg 5.

However, if the Cohen reference is decreasing the surface area of the reinforcing member, then it cannot anticipate the claims. Claim 41, for example recites "treating at least the portion of the surface of the one or more metallic filaments to provide a final surface area that is greater than the initial surface area (italics added)." Thus one cannot simply leave this point out of consideration; what the Cohen reference teaches regarding the relative surface areas of the reinforcing member before and after processing is essential to whether the reference teaches certain elements of the claimed invention.

This provides the proper context in which to analyze the last portion of the statement, in which the Examiner argues that "the end result of the [Cohen] etching process is expected to be a reinforcing member that has surface which [is] not completely smooth." This statement is probably perfectly true, but is not, by itself, relevant to the analysis. No surface under scrutiny of sufficiently sensitive instruments is, after all, completely smooth. Imperfections of one sort or another can always be detected. One might also make the equally correct and equally irrelevant—by itself—statement that the reinforcing member prior to the Cohen etching process is not completely smooth. (In fact, as discussed below, more support is found in Cohen for this statement than for the Examiner's statement.) The relevant question is not whether the end result of the Cohen etching process produces a surface that is or is not completely smooth; the relevant question is whether the Cohen etching process provides to the reinforcement member a final surface area that is greater than the initial surface area.

To answer this question, one needs to examine what, if anything, Cohen teaches about the initial surface conditions and the final surface conditions and what Cohen teaches about the etching process.

^{*} In the interests of full disclosure, appellants want to note that Cohen discusses another etching process (col. 9, ll. 29-42) used to taper the diameter of a wire core. Appellants explain in the Appeal Brief, pp. 7-8, why this etching process cannot result in an increase in surface area. This argument was not addressed in the Examiner's Answer and so appellants do not further address it here.

Cohen teaches that the wire core may have electrically insulating oxides or films present on the surface prior to etching. Cohen, col. 6, ll. 52-54. The initial surface of the wire core, because of the oxides and films on its surface, is not perfectly smooth. Cohen says very little about the final surface area except that these oxides and films "must be substantially removed." Looking only at these teachings of Cohen, which, so far as appellants can determine, are the only statements Cohen makes regarding the relative smoothness of the initial and final surfaces of the wire core, one might reasonably conclude that a final surface from which oxides and films have been substantially removed is smoother than an initial surface on which those oxides and films are still present.

Cohen describes the etching process only as "using an acid in an inert atmosphere" and describes its purpose as "one technique for removing such oxides and films from the surface of the wire core." Cohen, col. 6, ll. 58-61. Cohen is silent as to what acid may be used. All that the reader can know is that the acid is effective against oxides and films. Cohen is silent as to whether it affects the metal of the wire core at all. Because different acids affect various materials differently and some acids have no or little effect on some materials, one cannot assume that the etching process of Cohen would have any effect on the metal of the core wire. Cohen teaches only that the acid removes oxides and films. Because Cohen is silent as to what material the acid affects, the statement in the Examiner's Answer that "an acid etching process operates by molecular "pitting" i.e. removed pieces of material from the surface of the material" is somewhat beside the point. Cohen teaches that the removed pieces of material are oxides and films, and that these are substantially removed. Nothing in Cohen teaches is that the oxides and films of the core wire are substantially removed.

Because what Cohen teaches about the initial and final surface areas of the core wire does not compel or even reasonably suggest an increase in surface area of the core wire, and because the etching process of Cohen does not necessarily etch the metal (as opposed to the oxides and films) of the core wire, appellants suggest that the Examiner has failed to demonstrate that Cohen teaches a process by which the final surface area is necessarily greater than the initial surface area. Where a reference is silent, "the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the

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allegedly inherent characteristic <u>necessarily</u> flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). This the Examiner has not done. The Examiner has failed to consider what Cohen teaches about the initial and final surfaces of the wire core and has failed to consider what Cohen teaches about which materials of the wire core (i.e. metal, oxides, or films) the acid affects. There is no basis in fact and/or in technical reasoning to reasonably support the determination that an increase in surface area through the etching process of Cohen <u>necessarily</u> flows from the teachings of Cohen.

For the reasons discussed above and in the Appeal Brief, appellants believe that Cohen does not, in fact, teach a process by which the final surface area is made greater than the initial surface area. Appellants therefore respectfully maintain that claim 41 is not anticipated by Cohen; claims 41-56 are nonobvious over Parisi et al. in view of Cohen; and the Examiner's rejections of claims 41-56 under 35 U.S.C. §§ 102 and 103 should be overruled.

Respectfully submitted, RICHARD F. MURPHY

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